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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,522	03/09/2004	Joseph F. Poduslo	01017/30016A 2632	
· · · · ·	7590 08/28/200 GERSTEIN & BORUN	EXAMINER		
233 S. WACKER DRIVE, SUITE 6300			CHERNYSHEV, OLGA N	
SEARS TOWER CHICAGO, IL 60606			ART UNIT	PAPER NUMBER
•			1649	
			MAIL DATE	DELIVERY MODE
			08/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	· · · · · · · · · · · · · · · · · · ·	Application No.	Applicant(s)				
Office Action Summary		10/796,522	PODUSLO ET AL.				
		Examiner	Art Unit				
		Olga N. Chernyshev	1649				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
	Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS,						
WHIC - Exter after - If NO - Failui Any r	CHEVER IS LONGER, FROM THE MAILING DATE is in signs of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	l. ely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status		•					
· 1)⊠	Responsive to communication(s) filed on 13 Ju	ne 2007.	,				
2a)⊠	This action is FINAL . 2b) ☐ This action is non-final.						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims						
4)🛛	Claim(s) <u>31,33-48 and 51-72</u> is/are pending in	the application.					
	4a) Of the above claim(s) <u>47 and 51-66</u> is/are withdrawn from consideration.						
5)□	5) Claim(s) is/are allowed.						
6)⊠	Claim(s) 31,33-46,48 and 67-72 is/are rejected		·				
·	Claim(s) <u>35 and 69</u> is/are objected to.	•					
8)[Claim(s) are subject to restriction and/or	election requirement.	•.				
Applicati	on Papers						
9) 🗌 .	The specification is objected to by the Examine	f					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)[]	The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority u	inder 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
	☐ All b)☐ Some * c)☐ None of:	,					
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
	application from the International Bureau	, , , , , , , , , , , , , , , , , , , ,					
* 8	See the attached detailed Office action for a list of	of the certified copies not receive	d.				
Attachmen		n □	(DTO 440)				
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da					
3) 🛛 Inform	nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date <u>8/7/7</u> .	5) Notice of Informal P 6) Other:	atent Application				

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DETAILED ACTION

Response to Amendment

1. Claims 31, 48, 69-70 and 72 have been amended as requested in the amendment filed on June 13, 2007. Following the amendment, claims 31, 33-48 and 51-72 are pending in the instant application.

Claims 47 and 51-66 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention. Applicant timely traversed the restriction (election) requirement in the reply filed on February 27, 2006.

Claims 31, 33-46, 48 and 67-72 are under examination in the instant office action.

- 2. Any objection or rejection of record, which is not expressly repeated in this action has been overcome by Applicant's response and withdrawn.
- 3. Applicant's arguments filed on June 13, 2007 have been fully considered. New grounds of rejections are set forth below.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 31 and 42-45 stand rejected under 35 U.S.C. 102(b) as being anticipated by Schenk, 1999, WO99/27944.

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Applicant argues that "[a]ccording to Schenk, the A β polypeptide or analog is used as a vaccine to treat CNS disorder; thus, any peptide fused to the A β polypeptide or analog is <u>not</u> therapeutic" (p.8 of the Response). Applicant's argument has been given careful consideration but it is unpersuasive that peptides of Schenk fused with A β do not encompass polypeptides for treatment of CNS disorders. Since the class of molecules that are not A β polypeptides is very broad and there are no real limitations disclosed in the instant specification as filed as to what is specifically included or excluded as defining non-polypeptides "for treatment of CNS disorders", analogs of A β , and fusion peptides of Schenk fully meet all the limitations of the instant claimed invention.

New grounds of rejection necessitated by amendment Claim Rejections - 35 USC § 102

- 6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
 - (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 7. Claims 31, 33, 34, 42, 43, 48, 67-69 and 72 are rejected under 35 U.S.C. 102(b) as being anticipated by Wu et al., 1997, Reference C4 of IDS submitted on August 07, 2007.

Claims 31, 33, 34, 42, 43, 48, 67-69 and 72 are directed to compositions comprising Aβ polypeptide linked to a non-Aβ polypeptide, which is a monoclonal antibody. Document of Wu et al. discloses such composition comprising Aβ polypeptide (1-40) linked to a monoclonal antibody to the human insulin receptor. Since at p. 6 the instant specification specifically recites

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that non- $A\beta$ polypeptide could be any polypeptide and many polypeptides could be useful for treatment of CNS disorders, the limitations of the instant claims are met.

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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11. Claims 36-41, 46 and 70-71 rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. in view of Schenk.

Claims 36-41 recite compositions comprising amyloid polypeptide linked to an antibody, which is a monoclonal antibody, chimeric, humanized or a fragment. Publication of Wu et al. discloses linking of amyloid peptide to a monoclonal antibody. Since the art of antibody modification is well developed to produce and substitute a full size antibody for a fragment or a chimeric antibody and reasonably expect the same result of this procedure, the instant invention of claims 36-41 would have been obvious for one of ordinary skill in the art at the time of invention.

Further, claims 46 and 70-71 recite different modification within the known structure of amyloid peptide. Document of Schenk fully discloses analogs and mimetics of the amyloid polypeptide, which include substitutions of different amino acids as well as different length of the polypeptide (1-39, 1-40 or 1-42). Since publication of Wu et al. discloses linking of "normal" amyloid peptide to a monoclonal antibody and since substituting one amino acid with another one within the polypeptide sequence of $A\beta$ was fully disclosed in the art, it would have been obvious for a person of ordinary skill in the art to modify the composition of Wu et al. by changing the structure of $A\beta$ as indicated by Schenk and reasonably expect the resulting product to be the same.

Allowable Subject Matter

12. Claims 35 and 69 are directed to subject matter that is considered to be free of prior art and allowable if claims are rewritten in independent form. However, Applicant is advised that

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should claim 35, as amended, be found allowable, claim 69 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Conclusion

- 13. Claims 31, 33-46, 48 and 67-72 are rejected, claims 35 and 69 are objected to.
- 14. Applicant's amendment and submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on August 07, 2007, necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga N. Chernyshev whose telephone number is (571) 272-0870. The examiner can normally be reached on 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Y. Chan can be reached on (571) 272-0841. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Primary Examiner Art Unit 1649

August 24, 2007